REMARKS

The Examiner is thanked for providing the detailed explanation of the reasons for the rejection under 35 U.S.C. 103(a). Claims 1-6, 8, 10-11, 13-14 and 19-28 remain in the application.

Reconsideration is respectfully requested of the rejection of claims 1-6, 8, 10-11, 13-14, and 19-28 under 35 U.S.C. 103(a) as being obvious over JP 58-101197 (hereinafter '197 reference) in view of JP 2001233743 (hereinafter '743 reference).

The '197 reference, the Examiner's primary reference, discloses a creamy detergent composition comprising, as surfactants, a phosphate surfactant and a taurate surfactant. In particular, a creamy detergent is disclosed comprising sodium methyl myristoyl taurate, sodium chloride, polyethylene glycol, glycerin, and water (see International Search Report of corresponding International application No. PCT/JP03/01298).

The Examiner has specifically relied upon Example 6 of the '197 reference, which includes the following ingredients:

30 mass% sodium monolaurylphosphate

10 mass% sodium monomyristylphosphate

6 mass% sodium N-myristoyl methyl taurine

7 mass% sodium chloride

7 mass% polyethylene glycol

10 mass% glycerol

0.3 mass% perfumes

residual water

In the above cream detergent composition of Example 6, both the sodium monolaurylphosphate and the monomyristylphosphate serve as the main surfactants, and together constitute 40 mass% of the composition. In contrast, the present invention in claim 1 requires as the main surfactant, 5-50 mass % of an acyl salt anionic surfactant represented by the following general formula (1):

$$R^1CO\text{-}NR^2CH_2CH_2SO_3X \qquad (1)$$

(In this formula, R^1 denotes a hydrocarbon group having 10-24 carbons, R^2 denotes a hydrogen atom or methyl group, and X denotes an alkali metal, alkali earth metal, ammonium, or organic amine).

It is respectfully submitted that the '197 reference fails to disclose the inclusion one or more of taurine, N-methyltaurine, and N,N-dimethyltaurine, in combination with elements (a)-(d), required by claim 1, or taurines and nonionic surfactants having a HLB of 10 or more in combination with elements (a)-(d), as called for in base claim 8.

The '743 reference, the Examiner's secondary reference, fails to cure the deficiencies of the Examiner's primary reference. In particular, the '743 reference discloses a hair detergent comprising 1 - 30 wt% of an acyl N-methyltaurine salt and 70 – 99 wt% of polyhydric alcohols. It is respectfully submitted that there is no disclosure whatever in the '743 reference of the use of one or more of taurines, N-methyltaurine and N, N-dimethyltaurine in combination with the ingredients (a) – (d) as called for in Claim 1, or one or more taurines and nonanionic surfactants having a HLB of 10 or more together with the components (a) – (d) as called for in the claims

herein. On the contrary, that teaching or suggestion comes only from the present application and constitutes an important element or aspect of the present invention.

Moreover, it is respectfully urged that the misinterpretation of the '743 reference is not harmless error since the lack of taurine, N-methyltaurine, and N,N-dimethyltaurine in the '743 reference was intended to cure the deficiencies of the '197 reference. Consequently, the basis upon which the rejection is predicated is in error since neither of the Examiner's combination of references teaches or suggests the use in a detergent composition of one or more of taurine, N-methyltaurine, and N,N-dimethyltaurine, or taurines or non-anionic surfactants having an HLB of 10 or more with the other ingredients required by the claims.

Another issue presented is whether the prior art relied upon by the Examiner suggests the desirability of the claimed invention.

It is respectfully submitted that the answer to this issue is unequivocally in the negative for the reasons discussed hereinafter.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce a claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one skilled in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 55 USPQ 2d 1313, 1317 (Fed.Cir. 2000).

In the present case, the problem to be solved is to produce a detergent composition which

is in a paste or solid form over a wide temperature range, foams adequately, gives good sensation during use without causing a tingling sensation of the skin, exhibits superior stability, doesn't cause sliminess during rinsing, and exhibits a creamy foam quality (Specification, page 5, lines 1-8, and page 6, lines 1-9).

The '743 reference fails to disclose that the use of taurine, N-methyltaurine and N,N-dimethyltaurine, or taurines and non-anionic surfactants having an HLB of 10 or more in any detergent composition, would solve the problems of the present invention. For this reason, it is clear that the prior art relied upon by the Examiner fails to suggest the desirability of the claimed invention; consequently, the rejection fails as a matter of law in view of the above authority. Withdrawal of the rejection is accordingly respectfully requested.

Moreover, the '197 and '743 references fail to teach the unexpected results obtained by providing a paste or solid cleaning agent comprised of ingredients (a)-(e)as called for herein in base claims 1 and 8. In particular, the present inventors prepared numerous test compositions, and conducted numerous tests to determine the Kraft point of the test compositions, the external stability of the test composition after one week at 45°, the tingling sensation experienced by a user during use of the test compositions, foaming characteristics of the test compositions, smoothness at time of rinsing of the composition, moist sensation of the skin after drying, smoothness of the skin after drying, pH of the test composition, foam quality of the composition, refreshing sensation at the time of rinsing, and temperature dependence of the hardness.

As depicted in Table 2, for Experimental Examples 1-12, when polyethylene glycol was used in the claimed combination in an amount of 20 mass%, as called for in new claim 22, the

cleaning agent composition had a high Kraft point, good external appearance stability after 1 week at 45°, and a reduced tingling sensation during use. Likewise, Examples 13-27, prepared according to the present invention, exhibited similar characteristics.

With regards to the amount and quality of foam produced by the cleaning agent of the present invention, Experimental Examples 28-33 were prepared, as described on pages 24-25, and as shown in Table 4a on page 34 of the instant application. As depicted therein, it was unexpectedly discovered that satisfactory amounts and quality of foam are produced by the cleaning agent of the present invention within a pH range of 4.8-5.9.

Additionally, as shown in Table 5a, and as discussed on page 36, first paragraph, Examples 1 and 2, containing the claimed ingredient (a) of claim 1 within the claimed mass% range, exhibited superior temperature dependence of the hardness, external appearance stability after 1 week at 45°, usability of the foam, smoothness at the time of rinsing, moist sensation after drying, and smoothness after drying, in comparison to Comparative Examples 1-4.

Regarding the composition of base claim 8, tests were conducted to determine the stability, foaming and usability of same, the results of the test being shown in Table 1b on page 44, and as shown in Table 2b on page 45. As discussed on page 44, lines 2-14, it was unexpectedly discovered that, by combining two anionic surfactants (sodium lauroyl methyltaurate and sodium myristoyl methyltaurate) as ingredient (a) with sodium chloride as ingredient (b), glycerin as ingredient (c), and water as ingredient (d), a composition is produced which exhibited superior stability, good foaming and a refreshing sensation during use.

In contrast, Comparative Examples 1-4, failed to simultaneously exhibit good stability,

good foaming and a refreshing sensation during use. Comparative Example 4, which contained solely an anionic surfactant (sodium myristoyl glutamate), had good stability and a refreshing sensation, but exhibited poor foaming ability.

Importantly, as illustrated in Tables 3b and 4b on pages 52 and 53 of the instant application, it was unexpectedly discovered that, in contrast to Comparative Examples 1-V which only contained claimed ingredients (a)-(d), compositions additionally containing taurine as ingredient (e), in combination with claimed elements (a)-(d) (see Examples I-III therein) exhibited superior stability, foaming, and usability (refreshing sensation), AS WELL AS little tingling sensation during use, high foaming quality (creaminess), and excellent external appearance stability after 1 week at 45°.

Proof of an unexpected improvement can rebut a *prima facie* case of obviousness. *In re Murch* 464 F2d 1051, 175 USPQ 89 (CCPA 1972); *In re Costello* 480 F2d 894, 178 USPQ 290 (CCPA 1973). As discussed above, the present inventors unexpected discovered that superior stability, reduced tingling sensation experienced by a user during use, superior foaming, superior smoothness at time of rinsing, superior moist sensation of the skin after drying, superior smoothness of the skin after drying, superior foam quality of the composition, an improved refreshing sensation at the time of rinsing, and superior temperature dependence of the hardness of the composition of the present invention can be obtained when combining claimed elements (a)-(e) of base claims 1 and 8 in the manner called for in the claims herein. It is therefore believed that these test results evidencing unexpected results rebuts any prima facie case of obviousness.

In view of the deficiencies of the '197 and '743 references, and the unexpected improvements of the composition as now claimed herein, it is believed that the Examiner would now be justified in no longer maintaining the rejection. Withdrawal of the rejection is accordingly respectfully requested.

The Examiner's Response To Argument

In the Response to Argument bridging pages 2 and 3 of the final Office Action the Examiner has also made a number of comments concerning the prior art. It is believed these arguments do not constitute a rejection since they do not comply with 35 U.S.C. 132(a).

In these comments the Examiner refers to the JP 01-178596 reference (hereinafter '596 reference), owned by Shiseido Co., Ltd. the current assignee herein. This '596 reference discloses a detergent composition comprised of:

(A) an alkyloylalkyltaurine salt anionic surfactant;

(B) an alkyl glucoside;

(C) an amphoteric surfactant;

(D) a higher alcohol;

(E) an oil component;

(F) a water soluble polymer; and

(G) a cationic polymer.

In particular, Example 5 thereof, which pertains to a paste detergent composition manufactured with the following formula:

5 mass% myristoylmethyl taurine-K

5 mass% alkyl glucoside (n=8, a=10)

10 mass% potassium myristate

10 mass% potassium stearate

1 mass% bees wax

5 mass% glycerol

5 mass% polyethylene glycol

Appropriate amounts of perfume

Residual ion exchange water

In the above paste detergent composition, the potassium myristate and potassium stearate (metal soaps) serve as the main surfactants and together constitute 20 mass% of the composition.

In contrast, the present invention, defined in claim 1, requires as the main surfactant, 5-50 mass % of an acyl salt anionic surfactant represented by the following general formula (1):

$$R^1CO\text{-}NR^2CH_2CH_2SO_3X \qquad (1)$$

(In this formula, R^1 denotes a hydrocarbon group having 10-24 carbons, R^2 denotes a hydrogen atom or methyl group, and X denotes an alkali metal, alkali earth metal, ammonium, or organic amine). Such an acyl salt anionic surfactant is disclosed only as a secondary, non-essential surfactant in the '596 reference, and is always present in a larger amount than secondary surfactants, such as the metal soaps disclosed in the '596 reference.

Further, the '596 reference fails to disclose the inclusion one or more of taurine, N-methyltaurine, and N,N-dimethyltaurine, or taurines and nonionic surfactants having a HLB of 10 or more, in combination with elements (a)-(d), called for in amended base claims 1 and 8,

respectively.

As discussed above, the '596 reference, owned by Shiseido Co., Ltd. the current assignee herein, discloses a detergent composition comprised of:

(H) an alkyloylalkyltaurine salt anionic surfactant;

(I) an alkyl glucoside;

(J) an amphoteric surfactant;

(K) a higher alcohol;

(L) an oil component;

(M) a water soluble polymer; and

(N) a cationic polymer.

In particular, the Examiner has cited Example 5 thereof, which pertains to a paste detergent composition manufactured with the following formula:

5 mass% myristoylmethyl taurine-K

5 mass% alkyl glucoside (n=8, a=10)

10 mass% potassium myristate

10 mass% potassium stearate

1 mass% bees wax

5 mass% glycerol

5 mass% polyethylene glycol

Appropriate amounts of perfume

Residual ion exchange water

In the above paste detergent composition specifically cited by the Examiner, the potassium myristate and potassium stearate (metal soaps) serve as the main surfactants and together constitute 20 mass% of the composition.

In contrast, the present invention, defined in claim 1, requires as the main surfactant, 5-50 mass % of an acyl salt anionic surfactant represented by the following general formula (1):

$$R^1CO\text{-}NR^2CH_2CH_2SO_3X \qquad (1)$$

(In this formula, R^1 denotes a hydrocarbon group having 10-24 carbons, R^2 denotes a hydrogen atom or methyl group, and X denotes an alkali metal, alkali earth metal, ammonium, or organic amine). Such an acyl salt anionic surfactant is disclosed only as a secondary, non-essential surfactant in the '596 reference, and is always present in a larger amount than secondary surfactants, such as the metal soaps disclosed in the '596 reference.

Further, the '596 reference fails to disclose the inclusion one or more of taurine, N-methyltaurine, and N,N-dimethyltaurine, or taurines and nonionic surfactants having a HLB of 10 or more, in combination with elements (a)-(d), called for in amended base claims 1 and 8, respectively.

The JP '743 reference discussed above fails to cure the deficiencies of the '596 reference. In particular, the JP '743 reference discloses a hair detergent comprising 1 - 30 wt% of an acyl N-methyltaurine salt and 70 – 99 wt% of polyhydric alcohols. It is respectfully submitted that there is no disclosure whatever in the JP '743 reference of the use of one or more of taurines, N-methyltaurine and N, N-dimethyltaurine in combination with the ingredients (a) – (d) as called for in Claim 1, or one or more taurines and nonanionic surfactants having a HLB of 10 or more

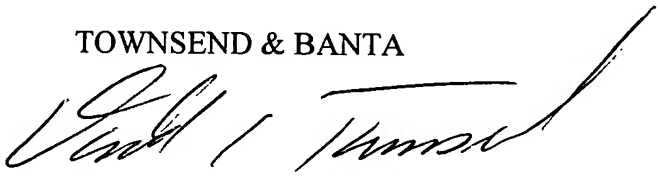
together with the components (a) – (d) as called for in the claims herein. On the contrary, that teaching or suggestion comes only from the present application, and constitutes an important element or aspect of the present invention.

In view of these deficiencies of the cited '596 and '743 references, it is respectively submitted that the Examiner's proposed combination of references in no way anticipates or renders unpatentably obvious the subject matter called for in the claims herein.

In view of the foregoing, it is respectfully submitted that the application is now in condition for allowance, and early action and allowance thereof is accordingly respectfully requested. In the event there is any reason why the application cannot be allowed at the present time, it is respectfully requested that the Examiner contact the undersigned at the number listed below to resolve any problems.

Respectfully submitted,

TOWNSEND & BANTA



Donald E. Townsend
Reg. No. 22,069

CUSTOMER NO. 27955

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